

6. Claims

We claim:

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1. A system for setting up base stations in relation to existing base stations comprising:

a first base station having a receiver, a processor, and a transmitter,

wherein said receiver receives signals from existing base stations, said processor processes adds said existing base stations to a list of base stations, and said transmitter transmits said list to other base stations.

2. The system according to claim 1, wherein said list includes candidate base stations and always handoff base stations.

3. The system according to claim 1, wherein said other base stations approve or disapprove of said list from said first base station.

4. A system for performing soft handoff of a mobile station comprising:

a source base station; and,

a target base station,

wherein said mobile station transmits an identity of said target base station to said source base station, wherein said source base station obtains information from said target base station, and wherein said source base station transmits at least some of said information to said mobile station.

5. A mobile station for use in a network with base stations, said mobile station comprising:

a receiver that determines an identity of a target base station; and

a transmitter that transmits said identity to a source base station,

wherein said receiver also subsequently receives information from said source base station additional information regarding said target base station.

6. A method for setting up a base station comprising the steps of:
determining neighboring base stations;
monitoring signals associated with said base stations;
determining how said signals compare with a signal generated by said base station;
5 ordering said base stations into a list; and,
transmitting said list to said base stations.

7. A method for performing soft handoff comprising the steps of:
receiving an identity of a target base station from a mobile station at a source base
station;

10 requesting information regarding said target base station;
receiving information regarding said target base station;
transmitting at least a portion of said information to said mobile station;
receiving an indication of successful handoff from said mobile station; and,
transmitting a source base station title to said target base station.

15 8. A method for performing soft handoff comprising the steps of:
transmitting an identity of a target base station from a mobile station to a source base
station;

receiving at said mobile station at least a portion of information at said mobile station,
said portion of information relating to information received at said source base station from said
20 target base station;

transmitting an indication of successful handoff from said mobile station,

wherein said source base station transmits a source base station title to said target base
station.